

10724731

10/458135

Page 1

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NEWS	2	"Ask CAS" for self-help around the clock
NEWS	3 May 12	EXTEND option available in structure searching
NEWS	4 May 12	Polymer links for the POLYLINK command completed in REGISTRY
NEWS	5 May 27	New UPM (Update Code Maximum) field for more efficient patent SDIs in CAPlus
NEWS	6 May 27	CAPlus super roles and document types searchable in REGISTRY
NEWS	7 Jun 28	Additional enzyme-catalyzed reactions added to CASREACT
NEWS	8 Jun 28	ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG, and WATER from CSA now available on STN(R)
NEWS	9 Jul 12	BEILSTEIN enhanced with new display and select options, resulting in a closer connection to BABS
NEWS	10 Jul 30	BEILSTEIN on STN workshop to be held August 24 in conjunction with the 228th ACS National Meeting
NEWS	11 AUG 02	IFIPAT/IFIUDB/IFICDB reloaded with new search and display fields
NEWS	12 AUG 02	CAPlus and CA patent records enhanced with European and Japan Patent Office Classifications
NEWS	13 AUG 02	STN User Update to be held August 22 in conjunction with the 228th ACS National Meeting
NEWS	14 AUG 02	The Analysis Edition of STN Express with Discover! (Version 7.01 for Windows) now available
NEWS	15 AUG 04	Pricing for the Save Answers for SciFinder Wizard within STN Express with Discover! will change September 1, 2004
NEWS	16 AUG 27	BIOCOMMERCE: Changes and enhancements to content coverage
NEWS	17 AUG 27	BIOTECHABS/BIOTECHDS: Two new display fields added for legal status data from INPADOC
NEWS	18 SEP 01	INPADOC: New family current-awareness alert (SDI) available
NEWS	19 SEP 01	New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!
NEWS	20 SEP 01	New display format, HITSTR, available in WPIDS/WPINDEX/WPIX
NEWS	21 SEP 14	STN Patent Forum to be held October 13, 2004, in Iselin, NJ
NEWS EXPRESS	JULY 30	CURRENT WINDOWS VERSION IS V7.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004
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FILE 'HOME' ENTERED AT 12:38:39 ON 16 SEP 2004

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 12:39:09 ON 16 SEP 2004

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 SEP 2004 HIGHEST RN 744786-72-9

DICTIONARY FILE UPDATES: 14 SEP 2004 HIGHEST RN 744786-72-9

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

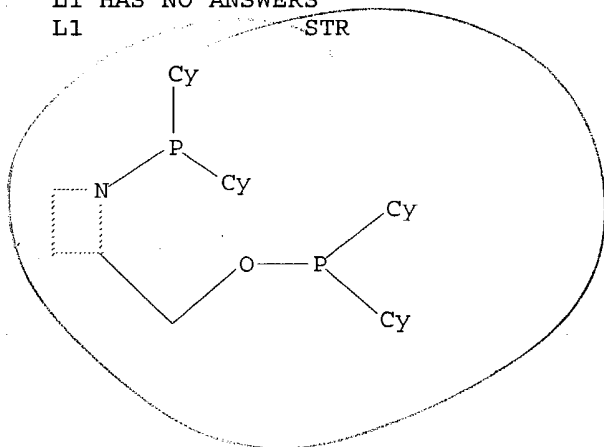
Uploading C:\Program Files\Stnexp\Queries\10724731C.str

L1 STRUCTURE UPLOADED

=> d L1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s L1

SAMPLE SEARCH INITIATED 12:39:43 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 0 TO 0  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	0.63

FILE 'CAPLUS' ENTERED AT 12:39:57 ON 16 SEP 2004  
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FILE COVERS 1907 - 16 Sep 2004 VOL 141 ISS 12  
FILE LAST UPDATED: 15 Sep 2004 (20040915/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s L1

**REGISTRY INITIATED**

Substance data SEARCH and crossover from CAS REGISTRY in progress...  
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 12:40:03 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*PROJECTED ITERATIONS: 0 TO 0  
PROJECTED ANSWERS: 0 TO 0

L3 0 SEA SSS SAM L1

L4 0 L3

=> set extend on  
SET COMMAND COMPLETED

=&gt; s L1 full

**REGISTRY INITIATED**Substance data SEARCH and crossover from CAS REGISTRY in progress...  
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 12:41:34 FILE 'REGISTRY'

L5 6 SEA SSS FUL L1 EXTEND

CANDIDATE STRUCTURE SEARCH COMPLETED - 6 TO ITERATE

100.0% PROCESSED 6 ITERATIONS 5 ANSWERS  
SEARCH TIME: 00.00.01

L6 5 SEA SSS FUL L1

L7 3 L6

=&gt; d 1-3 ibib abs hitstr

L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:714165 CAPLUS

DOCUMENT NUMBER: 137:232770

TITLE: Preparation of transition metal complexes containing  
chiral phosphine ligands for use as asymmetric  
hydrogenation catalysts

INVENTOR(S): Hassila, Heikki; Higashii, Takayuki

PATENT ASSIGNEE(S): Sumitomo Chemical Company, Limited, Japan

SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 1241174 A1 20020918 EP 2002-5894 20020314  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 JP 2002338589 A2 20021127 JP 2002-64944 20020311  
 US 2003191324 A1 20031009 US 2002-97009 20020314  
US 6762306 B2 20040713  
 US 2004110965 A1 20040610 US 2003-724731 20031202  
 PRIORITY APPLN. INFO.: JP 2001-71784 A 20010314

OTHER SOURCE(S): MARPAT 137:232770

AB Chiral phosphines [e.g., (S)-N,O-bis(diphenylphosphino)- $\alpha,\alpha$ -dimethyl-2-azetidine methanol, (I)] and their corresponding transition metal catalytic complexes were prepared. For example, (S)- $\alpha,\alpha$ -dimethyl-2-azetidine methanol was reacted with chlorodiphenylphosphine to give  $\%81$  I, which is further reacted with [Rh(COD)<sub>2</sub>]OTf to give the corresponding rhodium cyclooctadiene complex. In the presence of the rhodium complex,  $\alpha$ -acetylamino-4-chlorostyrene is hydrogenated to give  $\%90$  N-acetyl-(4-chloro)- $\alpha$ -phenethylamine.

IT 459426-40-5P 459426-43-8P

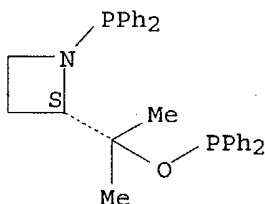
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of transition metal complexes containing chiral phosphine

ligands for use as asym. hydrogenation catalysts)

RN 459426-40-5 CAPLUS

CN Phosphinous acid, diphenyl-, 1-[(2S)-1-(diphenylphosphino)-2-azetidiny]-1-methylethyl ester (9CI) (CA INDEX NAME)

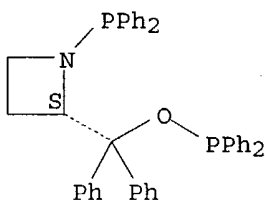
Absolute stereochemistry.



RN 459426-43-8 CAPLUS

CN Phosphinous acid, diphenyl-, [(2S)-1-(diphenylphosphino)-2-azetidiny]diphenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2000:820360 CAPLUS  
 DOCUMENT NUMBER: 134:131628

TITLE: Free and Cr(CO)<sub>3</sub>-Complexed Aminophosphine Phosphinite Ligands for Highly Enantioselective Hydrogenation of  $\alpha$ -Functionalized Ketones

AUTHOR(S): Pasquier, Corinne; Naili, Said; Mortreux, Andre; Agbossou, Francine; Pelinski, Lydie; Brocard, Jacques; Eilers, Juergen; Reiners, Iris; Peper, Viola; Martens, Juergen

CORPORATE SOURCE: Laboratoire de Catalyse de Lille Groupe de Chimie Organique Appliquee, Ecole Nationale Supérieure de Chimie de Lille, Villeneuve d'Ascq, 59652, Fr.

SOURCE: Organometallics (2000), 19(26), 5723-5732  
CODEN: ORGND7; ISSN: 0276-7333

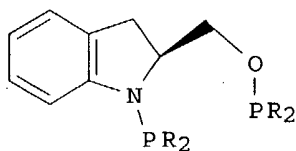
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:131628

GI



I

AB The synthesis and characterization of a new series of aryl- and cycloalkyl-substituted aminophosphine phosphinites, e.g. I (R = cyclopentyl), obtained from the reaction of the three precursors (S)-2-hydroxymethylazetidene, (S)-3-hydroxymethyl-1,2,3,4-tetrahydroisoquinoline, and (S)-2-hydroxymethylindoline and chlorophosphines is described. The aromatic ring in (S)-2-hydroxymethylindoline has allowed the synthesis and isolation of tricarbonyl chromium complexed amino alcs., which were similarly converted into the corresponding aminophosphine phosphinites, presenting a stereogenic center and a planar chirality. Ligand I ((S)-Cp,Cp-IndoNOP) revealed an unprecedented <sup>31</sup>P NMR fluxional behavior related to a rotation inhibition around the P-heteroatom (N and O) bonds. These new AMPP ligands were used in the enantioselective hydrogenation of various  $\alpha$ -functionalized ketones, i.e., dihydro-4,4-dimethyl-2,3-furandione 14, N-benzyl benzoylformamide 15, Et pyruvate 16, and 2-(N,N-dimethyl)aminoacetophenone hydrochloride 17. The stereoelectronic effects generated by the presence of the tricarbonyl chromium moiety onto the hydrogenations have been assessed. The beneficial effect of the matching chiralities in ligand associated with the use of the most appropriate nonchiral ligand Cl has resulted in a win of 13% of ee for the rhodium-based hydrogenation of 15. While using the most suitable new chiral AMPP ligand from this study, the four above-mentioned substrates were converted into the corresponding optically active alcs. in >99% ee (14/I), >99% ee (15/I), 87% ee (16/I), and >99% ee (17/I), resp.

IT 216592-61-9P 216592-67-5P 321744-12-1P

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);  
USES (Uses)

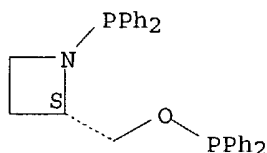
(preparation of free and chromium-complexed aminophosphine phosphinite ligands for highly enantioselective hydrogenation of

alpha-functionalized ketones)

RN 216592-61-9 CAPLUS

CN Phosphinous acid, diphenyl-, [(2S)-1-(diphenylphosphino)-2-azetidiny]methyl ester (9CI) (CA INDEX NAME)

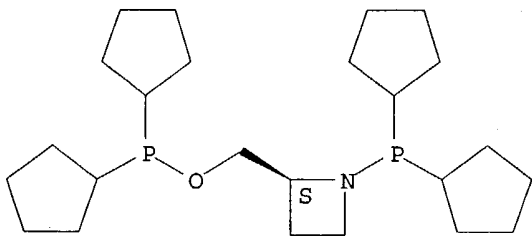
Absolute stereochemistry.



RN 216592-67-5 CAPLUS

CN Phosphinous acid, dicyclopentyl-, [(2S)-1-(dicyclopentylphosphino)-2-azetidiny]methyl ester (9CI) (CA INDEX NAME)

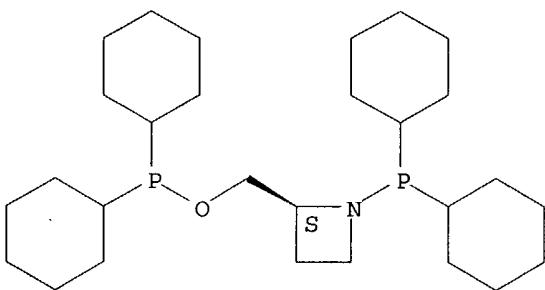
Absolute stereochemistry.



RN 321744-12-1 CAPLUS

CN Phosphinous acid, dicyclohexyl-, [(2S)-1-(dicyclohexylphosphino)-2-azetidiny]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 84 THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

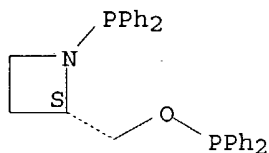
ACCESSION NUMBER: 1998:682695 CAPLUS

DOCUMENT NUMBER: 130:38471

TITLE: Enantioselective hydrogenation of functionalized ketones. Synthesis and application of new chiral aminophosphine-phosphinite ligands

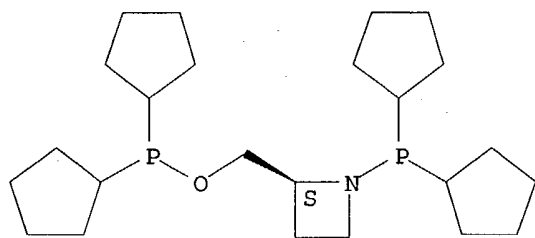
AUTHOR(S): Pasquier, Corinne; Eilers, Juergen; Reiners, Iris;  
 Martens, Juergen; Mortreux, Andre; Agbossou, Francine  
 CORPORATE SOURCE: Laboratoire Catalyse Heterogene Homogene, Groupe  
 Chimie Organique Appliquee ENSC Lille, Universite  
 Sciences Technologies Lille, Villeneuve d'Ascq,  
 F-59652, Fr.  
 SOURCE: Synlett (1998), (10), 1162-1164  
 CODEN: SYNLES; ISSN: 0936-5214  
 PUBLISHER: Georg Thieme Verlag  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 130:38471  
 AB Chiral aminophosphine-phosphinites were synthesized and applied  
 successfully in the enantioselective hydrogenation of dihydro-4,4-dimethyl-  
 2,3-furandione, PhCOCONHCH<sub>2</sub>Ph, and Et pyruvate providing the corresponding  
 hydroxy products in  $\leq$  97, 95, and 80% ee, resp.  
 IT 216592-61-9P 216592-67-5P  
 RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);  
 USES (Uses)  
 (preparation of chiral aminophosphine-phosphinite ligands and application in  
 asym. hydrogenation of ketones)  
 RN 216592-61-9 CAPLUS  
 CN Phosphinous acid, diphenyl-, [(2S)-1-(diphenylphosphino)-2-  
 azetidiny]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 216592-67-5 CAPLUS  
 CN Phosphinous acid, dicyclopentyl-, [(2S)-1-(dicyclopentylphosphino)-2-  
 azetidiny]methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT